



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,258	12/27/2000	Earl Hennenhoefer	0050936-000017	4827
21839	7590	03/22/2007	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			BROWN, RUEBEN M	
			ART UNIT	PAPER NUMBER
			2623	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/22/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/749,258	HENNENHOEFER ET AL.	
	Examiner Reuben M. Brown	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 December 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 5,6,23-28,30 and 32 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 5,6,23-28,30 and 32 is/are rejected.  
 7) Claim(s) 22 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, filed 4/17/2006, with respect to claims have been considered but are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6, 22-28, 30 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr, (U.S. Pat # 5,608,446), in view of Kauffman, (U.S. Pat # 6,915,530) and Flickinger, (U.S. Pat # 5,901,340).

Considering claim 5, the claimed local RF receiver and baseband out intelligent device system for use in transmitting digital information on an RF carrier through a wideband distribution network, comprising:

‘an intelligent device that receives a modulated RF signal carrying at least a digital portion, wherein the intelligent devices (ID) splits an IP proton from an non-IP signal portion of eth digital signal portion’, is met by the operation of the Home Controller 122 of Carr, which includes a splitter 150, (Fig. 4; Fig. 5). The splitter 150 splits IP signal that are destined for the PC 138 from regular TV programming destined for the STB 126 and TV 128, (col. 6, lines 30-67; col. 7, lines 4-15). As for the claimed feature of the ID removing the RF modulated carrier from the IP portion using a demodulator, Carr discloses that the Home Controller 122 includes a demodulator 154 that demodulates the IP signal received from the splitter 150.

Regarding the claimed addressable device having at least one input and output, which transmits at least a digital portion of a signal to a BUD, which then delivers the signal to the ID, Carr does not disclose any device external to the Home Controller 122. However Kauffman, which is in the same field of endeavor, discloses a Communications Gateway 140 that receives video programming, as well as IP data and delivers the information to a splitter 145, (col. 1, lines 31-45) which splits the information to the appropriate end device, either PC 135 or STB 155, (see Fig. 1; col. 4, lines 29-34). Kauffman goes on to teach that the Communications Gateway 140 may include a Communications Gateway board (CGB) 220, which includes a transceiver 350 based on the DOCSIS standard, i.e., it is addressable, see Fig. 3A; col. 7, lines 3-50. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Carr with the Communications Gateway 140 of Kauffman, at least for the advantage of

the its feature of detecting and removing ingress noise, which is a well known problem in two-way networks, see col. 5, lines 28-50.

Regarding the claimed BUD that receives the signal from the AD and transmits the signal to the ID, Carr does not discuss the claimed feature. Nevertheless, Flickinger teaches a wideband cabling system to distribute wideband signals modulated onto specific carriers within a specified frequency band among a plurality of outlets, col. 2, lines 18-35; col. 3, lines 37-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Carr with the feature of BUD, at least for the desirable purpose of distributing wideband signals among a plurality of outlets, by cascading the units, see col. 1, lines 29-45; col. 3, lines 21-46.

Regarding the claimed bandpass filters, examiner takes Official Notice that at the time the invention was made, bandpass filters were well known the art of RF receivers. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Carr with the well-known feature of bandpass filters, at least for the known benefit of only passing only a certain band of signals, while removing noise signals from the instant signal.

Considering claim 6, the combination of the Home controller 122 of Carr and the analysis of bandpass filter from claim 5, meets the claimed subject matter.

4. Claims 23-28, 30 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr, Kauffman, & Flickinger, further in view of Eames, (U.S. Pat # 6,493,875).

Regarding claim 23-28, 30 & 32, the instant claim additionally recites a wireless, intelligent device, including a wireless demodulator or a transcoder for transcoding wireless portion from the RF splitter to wireless port. The references cited above do not discuss wireless transmission. Nevertheless, Eames provides a well-known method of wireless transmission of video data within a dwelling, originating from a wireless gateway 200, see Fig. 2; col. 4, lines 41-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Carr with the feature of wireless transmission, at least for the desirable advantage of wireless video and data transmission within a local dwelling, at least for the improvement of reducing the number of wires needed to operate the system. The claimed transcoder and demodulator are necessarily included in Eames.

*Allowable Subject Matter*

5. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Considering claims 22, prior art does not teach or suggest the combination of elements, including the DSP receiving RF channel in use information from a channel detector, and traffic

data, such that the DSP uses the RF channel in use information to select an RF modulated carrier, an RF carrier channel width, and RF guardband width.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Masuda Teaches the use of bandpass filters prior to demodulation.
- B) Carhart In-home network with an RF splitter to TV and PC, where splitter has various filters.
- C) Yiu In-home wireless network.
- D) Gurusmai In-home network with bandpass filters.
- E) Campbell In-home network with addressable device (NID 26).

Art Unit: 2623

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

**Or:**

(571) 273-7290 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown

  
REUBEN M. BROWN  
PATENT EXAMINER